

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
22 September 2005 (22.09.2005)

PCT

(10) International Publication Number
WO 2005/088578 A1

(51) International Patent Classification⁷: **G08G 1/01**,
1/052, G01S 5/14

[CA/CA]; 12 Pommel Cres., Kanata, Ontario K2M 1A2
(CA).

(21) International Application Number:
PCT/CA2005/000403

(74) Agents: **ANDRADE, Dilip, C.** et al.; Borden Ladner Ger-
vais LLP, World Exchange Plaza, 100 Queen Street Suite
1100, Ottawa, Ontario K1P 1J9 (CA).

(22) International Filing Date: 17 March 2005 (17.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/553,541 17 March 2004 (17.03.2004) US
60/619,931 20 October 2004 (20.10.2004) US

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
ZM, ZW.

(71) Applicant (*for all designated States except US*): **KIRK,
Barrie** [CA/CA]; 73 Goldridge Drive, Kanata, Ontario
K2T 1E9 (CA).

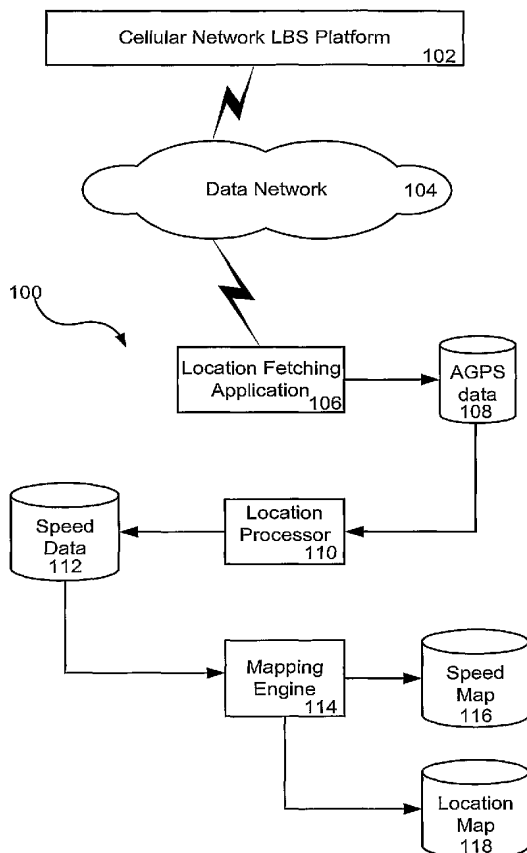
(72) Inventor; and

(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

(75) Inventor/Applicant (*for US only*): **FAGAN, Keith**

[Continued on next page]

(54) Title: SYSTEM FOR USING CELLULAR PHONES AS TRAFFIC PROBES



(57) Abstract: A system and method for determining the flow of traffic in a monitored route segment using global positioning system, or assisted global positioning system, enabled cellular phones as traffic probes takes advantage of the existing cellular infrastructure to deploy traffic probes to determine the flow of traffic based on the speed and direction of probes. Filtering of probe data can be used to remove probes having outlying results such as excessive speed, or probes that do not fit the general trend already observed on a traffic route segment.



ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— *of inventorship (Rule 4.17(iv)) for US only*

Published:

- *with international search report*
- *with amended claims and statement*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.